

Please replace the paragraph at page 1, line 31 to page 2, line 18 with the following:

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This apparatus is a laser that has a multi quantum well structure, for example. The laser comprises a laser light emitting device 10 formed of a laser diode, for use as a light source, and an FBG section 20, a light guide, which is a narrow-band reflector-type optical fiber having its reflection-peak wavelength adjusted to the Bragg wavelength. In this arrangement, the laser light emitting device 10 includes an active layer (not shown) and antireflection and high-reflection surfaces 11 and 12 formed on either side of the active layer. On the other hand, the FBG section 20 includes a lensed fiber having a first end facet 21 lensed in the shape of a hemispherical surface, a grating 22 formed in the fiber core, and a second end facet small-diameter portion 23 of a cladding that is connected with a connector 30. In the laser constructed in this manner, light is generated in the active layer by injected current, and it is reflected by an external cavity, which is formed between the high reflection surface 12 and the grating 22, and is delivered as a laser beam from the second end facet small-diameter portion 23 through the connector 30.

Please replace the paragraph at page 2, lines 19-29 with the following:

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A3

Parameters for the laser with this arrangement were set as follows. In the laser light emitting device 10, the field reflectance of the antireflection surface 11 was set at 10^{-4} or less, and the length from the antireflection surface 11 to the high-reflection surface 12 was adjusted to 600 μm or less. In the FBG section 20, the field reflectance and the full width at half maximum for the Bragg wavelength were set at 0.4 or less and 0.1 mm, respectively. The first end facet 21 was subjected to antireflection coating, its field reflectance was set at 0.4 or less, and the optical coupling factor was adjusted to 0.5.

Please replace the paragraph at page 2, line 30 to page 3, line 13 with the following:

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FIG. 6 is a characteristic diagram showing a noise characteristic as the result of this experiment. Based on this result, the inventors hereof confirmed that the level of noises produced by connector connection, that is, the intensity level of reflected return light that returns from the connector toward the laser, would inevitably influence the transmission band. Thereupon, the inventors hereof obtained the relative intensities of noises for the cases where a physical connector (PC), superphysical connector (SPC), angled physical connector (APC) were connected individually to the second end facet 23 of the cladding. FIG. 7 is a diagram showing the results. For the cases "NO